

Searching for Granules

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Overview

Granules shown are based on the selections made by the user on the main page. If a single dataset was selected during Dataset Discovery, the granules from that dataset will be shown, 9 at a time in a scrollable list as shown

The screenshot shows the 'Step 1: Select Granules' interface. It has a header bar with a help icon. Below the header, there are two tabs: 'List View' (selected) and 'Map View'. The main content area displays a list of datasets. The first dataset is '15 Minute Stream Flow Data: USGS (FIFE)' with archive center 'ORNL_DAAC', short name 'doi:10.3334/ORNLDAAC/1', and version '1'. The second dataset is 'ADVANCED MICROWAVE SOUNDING UNIT-A (AMSU-A) SWATH FROM NOAA-15 V1' with archive center 'GHRC', short name 'amsua15sp', and version '1'. The third dataset is 'AIRS/Aqua Level 1B Calibration subset V005' with archive center 'GESDISC', short name 'AIRXBCAL', and version '005'. Each dataset entry has a search icon and an information icon. At the bottom, there is a 'Step 2: Go to Cart' header and a 'View Items in Cart' button.

If multiple datasets were selected, the granules are grouped by parent dataset as shown.

The screenshot shows the 'Step 1: Select Granules' interface with granules grouped by parent dataset. The 'List View' tab is selected. The main content area shows a dataset '15 Minute Stream Flow Data: USGS (FIFE)' with archive center 'ORNL_DAAC', short name 'doi:10.3334/ORNLDAAC/1', and version '1'. Below the dataset, there is a 'Save Granule Results' button. The granules are displayed in a table with columns: Granule ID, Start Time, End Time, Online Access, Browse, All, and Info. The table shows 9 granules, all with 'Online Access' checked. The granules are grouped by parent dataset. At the bottom, there is a 'Step 2: Go to Cart' header and a 'View Items in Cart' button.

Data Quality Summaries

Some datasets have associated quality information. This is displayed the first time a dataset's granules are viewed. **Be sure to read over these summaries and use the data accordingly.** Once you accept the data quality summary, it will no show up again. To view the data quality summary (if available) for a dataset at a later time, you can always click the Data Quality Summary icon () in the dataset title bar.

The screenshot shows a dialog titled 'Data Quality Summaries for MODIS/Aqua Thermal Anomalies/Fire 5-Min L2 1km V005 NRT'. The dialog contains text about the MODIS NRT product, stating that it is generated within 3 hours of observation time to support application users interested in monitoring events in real-time. It also mentions that a number of changes have been made to the standard processing approach to meet the NRT latency requirement. The dialog includes a link to the MODIS NRT data and a link to the LANCE NRT data. At the bottom, there is a 'Last Updated' timestamp and an 'Accept' button.

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Annotated Granule Results Views

The screenshot below walks you through various parts of the Granule Results screen. By default **List View** tab is selected view granules in a list. When a dataset is selected, Reverb will perform a granule search. Select the granules by clicking the **Shopping Cart** icon. After selecting the shopping cart icon to add a granule to the cart, re-clicking the icon will remove the granule from the cart. Each granule's **Granule ID**, **Start Time**, and **End Time** fields are shown. You can sort by these columns by clicking on the header. The check under the **Online Access** column indicates the granule is accessible online (via FTP or HTTP). The check under the **Browse** column indicates there is browse data for the granule.

There are also additional search options available at the granule level. See the section on **Refining Your Search with 'More Search Options'** below for more information this.

List View

list view selected by default

granule search options

Step 1: Select Granules

List View Map View

15 Minute Stream Flow Data: USGS (FIFE)
Archive Center: ORNL DAAC Short Name: doi:10.3334/ORNLDAAC/1 Version: 1

Save Granule Results

sortable columns

available online

added to cart

get granule information

no browse images available

not yet added to cart

Showing 1 to 9 of 39 granules Total Query Time: 1.62s

Step 2: Go to Cart

View Items in Cart

Granule Information View

When you click on the information icon () for an individual granule, you will be presented with a dialog similar to the following. This shows the **Granule UR**, **Temporal and Spatial Extents** as well as links to retrieve the granule **data** and its **metadata** in a variety of formats (e.g. ECHO10, ISO19115 and atom). You can also look at more information fields by clicking the **Show Additional Information** link near the bottom of the entry.

Granule Details for MYD14.A2013204.0510.005.2013204161734.NRT.hdf

Granule UR:
LANCEMODIS:227038833

Spatial Extent:
["Polygon: Outer Boundary:((70.377039°, -63.045963°), (52.021126°, -61.466481°), (47.578838°, -28.729163°), ..., (70.377039°, -63.045963°)) Holes: 0"]

Temporal Extent:
2013-07-23T05:10:00.000000Z to 2013-07-23T05:15:00.000000Z

Online Access:
<ftp://nrt1.modaps.eosdis.nasa.gov/allData/1/MYD14/2013/204/MYD14.A2013204.0510.005.NRT.hdf>

Online Resources:
<http://modis-land.gsfc.nasa.gov/>
Overview of MODIS Land Data Products
<http://modis-land.gsfc.nasa.gov/surfrad.html>
Overview of Surface Reflectance

Download Metadata:
Native | Atom | ECHO 10 | ISO 19115

Show Additional Information

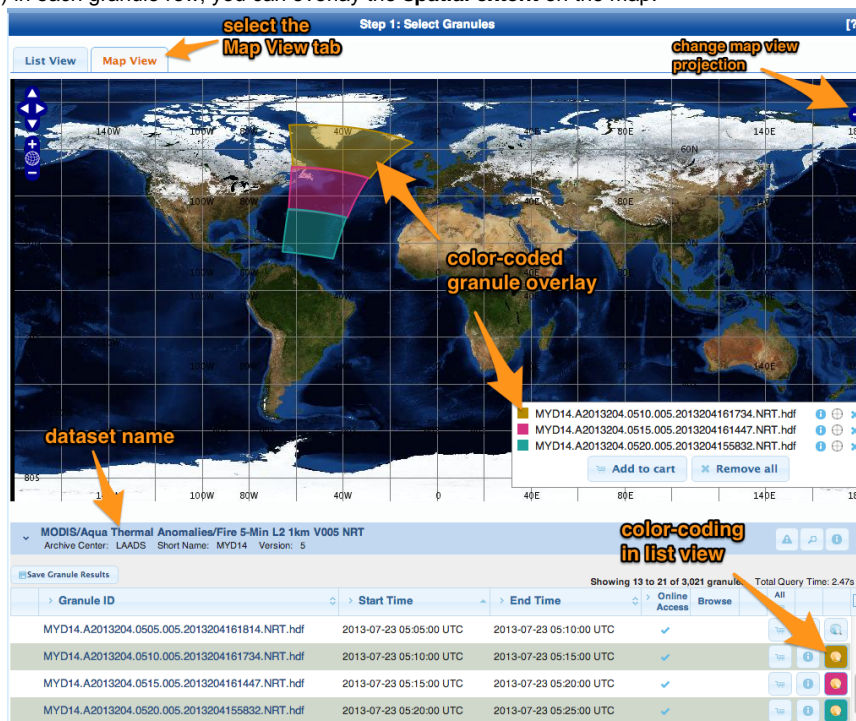
online data access url

direct metadata download

view granule info in browser

Map View

You can also view specific granules' spatial extent overlaid on a map using the **Map View** tab. When clicking on the globe icon () in each granule row, you can overlay the **spatial extent** on the map.



You can switch between map projections by clicking the small plus icon in the upper right corner of the map. Look at the image for supported projection and other overlays.



Refining Your Search with 'More Search Options'

Sometimes granules have specific attributes that may be selected when trying to filter search results. The **More Search Options** dialog box allows you to perform this filtering. This can be accessed by clicking on the search icon ()

in the dataset title. The options include:

- **Day/Night Flag**, find granules captured during the day, night or anytime by selecting from the drop down menu.
- **Data Access**, find granule that has only browse images and/or granules with only online access. Click the appropriate box.
- **Cloud Cover**, find granules by cloud cover percentage. Enter the percentage into the box. User can also enter a percentage range by clicking the link under the box and typing the ranging to the boxes.
- **Orbit Spatial Parameters**, find granules with specific orbital spatial characteristics. Users can enter the Orbital Number, Equatorial Crossing Longitude and/or the Equatorial Crossing Date. Users can also enter the range for each field by clicking the link under the box and typing the ranging to the boxes.
- **Dataset Specific Additional Attributes**, some datasets have additional attributes or product specific attributes (**PSAs**) that can be searched for among the granules included in the dataset. These parameters vary, but can be used as search criteria. Look at the **image on the right** to see some sample PSAs available for search in one of ECHO's near-real-time metadata holdings.

To apply these options to your granule results, click **OK** at the bottom of the dialog.

The image shows a search options dialog with two main panels. The left panel contains search filters: 'Day/Night Flag' with a dropdown menu set to 'Anytime'; 'Data Access' with checkboxes for 'Browse Images' and 'Online Access'; 'Cloud Cover' with a 'Percentage' input field and a link to 'Click Here to Enter Range'; and 'Orbit Spatial Parameters' with input fields for 'Orbit Number', 'Equatorial Crossing Longitude', and 'Equatorial Crossing Date', each with a corresponding 'Click Here to Enter Range' link. The right panel, titled 'Additional Attributes', lists several attributes: 'PercentCloudCover', 'PercentGoodQuality', 'PercentLand', 'PercentOtherQuality', and 'ScienceQualityFlag'. Each attribute has a 'Float' input field and a 'Click Here to Enter Range' link. At the bottom of the right panel is a 'String' input field. The dialog has 'Clear', 'OK', and 'Cancel' buttons at the bottom right.

Accessing the Shopping Cart

The items in the cart have been automatically updated with granules as the user clicked the shopping cart item. To view items, select **View Items in Cart**. To find out more about the Shopping Cart, [click here](#).

The image shows a dialog box titled 'Step 2: Go to Cart' with a '[?]' icon in the top right corner. Inside the dialog, there is a single button labeled 'View Items in Cart'.